

## Postdoctoral Fellowship Offer

Laboratoire d'innovation et de recherche en énergie intelligente (LIREI) [www.uqtr.ca/lirei](http://www.uqtr.ca/lirei)

Institut de recherche sur l'hydrogène

Université du Québec à Trois-Rivières, C.P. 500

3351 boulevard des forges

Trois-Rivières (Québec) Canada G9A 5H7

The *Laboratoire d'innovation et de recherche en énergie intelligente (LIREI)* at the *Hydrogen Research Institute* is seeking a **postdoctoral researcher to join our team working on smart grid technologies, with a specific focus on demand-side management and home energy management**. In collaboration with industry partners Hydro-Québec, Hilo, Stelpro, Elmec, and Ecosystem, LIREI is developing a hierarchical and adaptive model for managing flexibility sources in the electrical distribution grid.

## Candidate Profile

The ideal candidate will have a Ph.D. in electrical, electronic, or computer engineering, along with the following technical skills:

- Optimization methods applied to energy management.
- Artificial intelligence for energy management.
- Energy economics: sustainability, security and affordability.
- Smart power grids and multi-agent systems.

The successful candidate will be expected to lead both experimental and theoretical aspects of the research program within the *Hydro-Québec Research Chair on Transactive Management of Electrical Energy*. In addition, the candidate will contribute to writing academic papers, grant proposals, and technical reports.

## Responsibilities

- Conduct experimental and theoretical research as part of the Hydro-Québec Research Chair program.
- Actively participate in the development and dissemination of new knowledge, including writing articles, reports, and grant applications.
- Potentially deliver presentations and conferences.
- Occasionally supervise students at LIREI.

## Duration and Grant

The initial appointment will be for one year, with the possibility of renewal for a second year based on mutual satisfaction and funding availability. The post-doctoral grant is competitive.

## Application Instructions

Interested applicants should submit the following documents to [lirei.info@uqtr.ca](mailto:lirei.info@uqtr.ca)

- A cover letter outlining how their background, experience, and qualifications align with the position.
- CV detailing scholarships, distinctions, publications, and research experience.
- Academic transcripts.
- Contact information for at least two references.
- A scientific publication with you as first author on a subject related to those mentioned above.